How Utility Bills are calculated for Electric and Natural Gas

Electric

To determine the electric usage in kWh, subtract the previous reading from the current reading after a certain amount of time (e.g. a week, a month, etc.) The cost of the electric usage is calculated by multiplying the usage in kWh by the current residential energy rate (e.g. $0.131538).

For example, if the previous meter reading is 18557 and the current reading is 19702, the difference or total electric usage is 1145 kWh. The electric cost would be calculated as: 1145kWh X $0.131538 = $150.61.*

**Does not include the RMPU $14 monthly customer charge.*

Natural Gas

Natural gas appliances have a BTU rating, which represents the amount of gas consumed in a one-hour period. Natural gas meters read usage in CCFs, but the customer is billed in therms. One therm equals 100,000 BTUs. To calculate how much an appliance will cost per hour to run, simply multiply the BTU rating by the current natural gas rate and divide by 100,000. For example, using the natural gas rate of $1.32709/therm, it would cost $0.40 per hour to use gas logs with a rating of 30,000 BTUs.

To estimate the cost of natural gas usage in the home, first determine the usage by subtracting the previous meter reading from the current after a certain amount of time. For example, if the previous meter reading is 5429 and the current is 5480, the usage would be 51 CCF for that time period.

The usage is measured in CCFs (volume) but billed in therms (heat factor). To convert the usage into therms, RMPU must follow a series of steps. First, the usage must be multiplied by the pressure factor, followed by the therm factor* to convert the usage into therms.

The cost would then be calculated as below using a pressure factor of 1.000, a therm factor of 1.0147, and the following rates: $1.52709 for the first 10 therms and $1.32709 for the remaining therms.

5480 - 5429 = 51 CCF (gas usage)
51 CCF X 1.000 = 51 X 1.0147 = 51.7497
$1.52709 X 10 = $15.27 (for the first 10 therms)
51.7497 - 10 = 41.7497 X $1.32709 = $55.4
$55.4 + $15.27 = $70.67**
***Does not include the monthly $9 facilities charge.*

Some customers receive natural gas at a higher pressure and a pressure factor must be applied when calculating their bill. This is to ensure that their gas usage is properly measured. The pressure factor varies per customer because it depends on the delivery pressure, which is determined by the type of meter index -- i.e. the row of dials (analog) or numbers (digital). For most new meters, a pressure factor is used to adjust the usage measurement.

The "Multiplier/Factor" on the utility bill is the therm factor. Similar to the pressure factor, the therm factor is used to adjust the usage measurement to ensure an accurate reading. Natural gas is measured in CCFs but billed in therms. A therm factor is necessary to convert the CCFs to therms for billing purposes. The therm factor is applied to all natural gas customers' utility bills. The value of the factor changes annually.